

WHAT IS CLAIMED IS:

1. A ladder filter comprising multiple inductor sections, each said inductor section being implemented by an equivalent circuit including voltage-controlled current sources and capacitors,

wherein a signal input to the ladder filter is provided to at least one of the voltage-controlled current sources by way of gain adjusting means, and

wherein a gain obtained by the gain adjusting means is set to such a value as realizing a desired transfer function for the ladder filter.

2. The ladder filter of Claim 1, wherein a ratio of the gains obtained by the gain adjusting means is set to such a value as making the ladder filter exhibit a desired gain-boosted characteristic independent of its phase characteristic.

3. The ladder filter of Claim 1, further comprising:

a first signal input terminal provided for a filtering process; and

a second signal input terminal provided separately from the first signal input terminal,

wherein the gain adjusting means receives a signal that has been input to the second signal input terminal.

4. The ladder filter of Claim 3, further comprising a variable-gain amplifier provided at a stage preceding the second signal input terminal.

5. The ladder filter of Claim 1, wherein a variable gain is obtained by the gain adjusting means.

6. An analog equalizer comprising:

a ladder filter including multiple inductor sections, each said inductor section being implemented by an equivalent circuit including voltage-controlled current sources and capacitors;

means for detecting an error between an output signal of the ladder filter and a reference signal; and

means for changing a filter characteristic of the ladder filter by reference to the error that has been detected by the detecting means,

wherein a signal input to the ladder filter is provided to at least one of the voltage-controlled current sources by way of gain adjusting means, which obtains a variable gain, and

wherein the changing means changes the gain, obtained by the gain adjusting means of the ladder filter, based on the error that has been detected by the detecting means.

7. A signal readout system comprising the analog equalizer as recited in Claim 6,

wherein the system reads out a signal from a recording medium such as a magnetic or magneto-optical disk and filters the signal using the analog equalizer.